

Work Order ID 95841

\*95841\*

Page 1

January-21-13 7:59:13 AM

Item ID: D3205-1

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Pedal Bracket

Stop

\*NS2\*

Start Date: 1/16/13 Start Qty: 10.00 \*10\*

Cust Item ID:

Required Date: 1/31/13 Req'd Qty: 10.00 \*10\*

Customer:

Reference:

Approvals: Process Plan:

P

Date 13-01-21

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100		0.00							
*100*	BAND SAW								
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks: 3.250" x 2.500" x 4.250" long Bar (+0.030/-0.000)								
110		0.00							
*110*	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	Machine D3205-1 as per Folio FA346 and Dwg D3205 Identify as D3205-1								
	Deburr and Tumble								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
*120*	Memo	0.00							
QC									
Quality Control									

13/02/04  
B.A 13/02/05

X9 4

(DAS  
08  
289)

B.A 13/02/06

9 4

(DAS  
08  
289)

B.A 13/02/06

9 4

NCR: Yes / No

## **WORK ORDER NON-COMPLIANCE / UPDATE**

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

**Work Order ID 95841****\*95841\***

Page 2

January-21-13 7:59:13 AM

Item ID: D3205-1

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Pedal Bracket

Stop

**\*NS2\***Start Date: 1/16/13 Start Qty: 10.00 **\*10\***

Cust Item ID:

Required Date: 1/31/13 Req'd Qty: 10.00 **\*10\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC8- Inspect parts - second check

0.00

9

DAS  
25  
9-69 13-02-8**\*130\***

QC

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

9 13-29

**\*140\***

HandFinish

Hand Finishing

Memo

0.00

150

Grey Sandtex(Ref A 3.5.6) per QSI005 4.3

0.00

**\*150\***

Powdercoat

Powder Coating

Memo

0.00

Note: Cover the thread hole for D3205-1 before powder coat.START

TIME: 9:00 OVEN TEMPERATURE:FINISH TIME: 10:00

9 13-21

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS									
		Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other							
Part No. _____  NCR No. _____													
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
FAULT CATEGORY													
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
												<input type="checkbox"/> Other	

**Work Order ID 95841**

January-21-13 7:59:13 AM

**\*95841\***

Page 3

**Item ID:** D3205-1

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

**Revision ID:**

**Item Name:** Pedal Bracket

Stop

**\*NS2\***

**Start Date:** 1/16/13

**Start Qty:** 10.00

**\*10\***

**Cust Item ID:**

**Required Date:** 1/31/13

**Req'd Qty:** 10.00

**\*10\***

**Customer:**

**Reference:**

**Approvals:** Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

**Sequence ID/  
Work Center ID**

**Operation  
Description**

**Set Up/  
Run Hours**

**Tool ID**

**Tool #**

**Plan  
Code**

**Accept  
Qty**

**Reject  
Qty**

**Reject  
Number**

**Insp.  
Stamp**

160

**\*160\***

QC

Quality Control

QC3- Inspect Part Finish

0.00

DAS

15

69

0.00

13-2-11

170

Identify as per dwg & Stock Location.

*SIGA*

0.00

**\*170\***

Packaging

Packaging

Memo

0.00

*9x*

*13-2-11*

180

QC21- Final Inspection - Work Order Release

0.00

**\*180\***

QC

Quality Control

Memo

0.00

*13/2/13*

*13-02-12*

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other							

# Picklist Print

January-21-13 7:59:13 AM

Page 1

Work Order ID: 95841

Parent Item: D3205-1

Parent Item Name: Pedal Bracket

Start Date: 1/16/13

Required Date: 1/31/13

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP A04.06.09New issueKJ/RF

IPP Rev:B 08-12-16 attach DEO DD verified by:EC  
03-23 JLM VERIFIED BY:EC

IPP REV:C AS PER REV B 12-

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T73B2.500X03.25 7075-T73 Bar 2.50 x 3.25		Purchased	No			100	f	0.0000	0.3646	3.837895	B.A.	13/02/05	

→ M122637

2.8733 ft

→ M121769

0.3594 ft

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				<input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update	<input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab	<input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite	<input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier	<input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other							

DART AEROSPACE LTD	Work Order:	95841
Description: Pedal Bracket	Part Number:	D3205-1
Inspection Dwg: D3205 Rev: B		Page 1 of 1

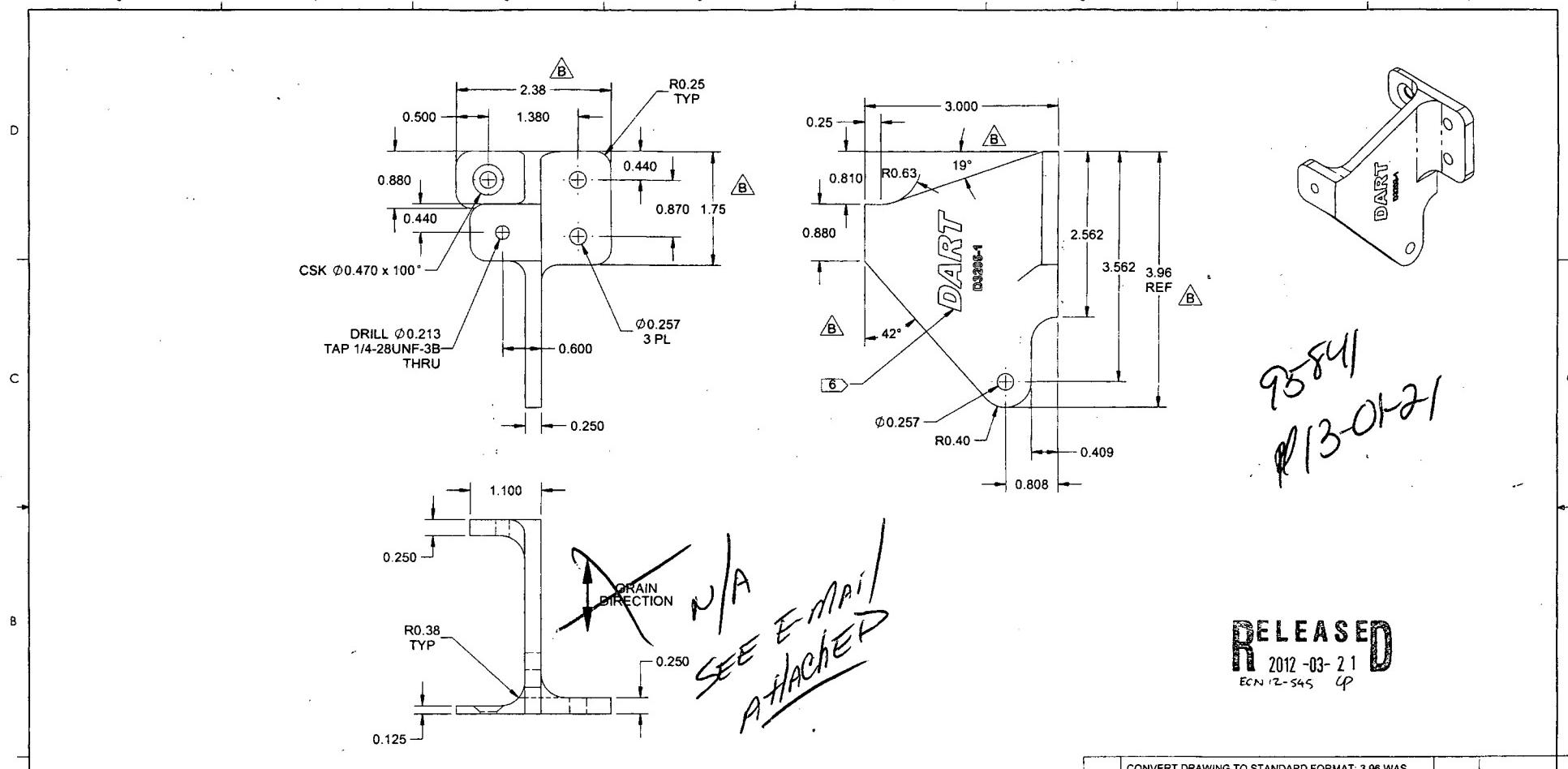
### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.100	+/-0.010	1.104	✓		Vern	GA-01
0.250	+/-0.010	0.252	✓		"	"
R0.38	+/-0.030	R 0.375	✓		R-6	ref.
0.125	+/-0.010	0.128	✓		Vern	GA-01
0.250	+/-0.010	0.255	✓		"	"
2.380	+/-0.010	2.384	✓		"	"
1.380	+/-0.010	1.380	✓		"	"
0.500	+/-0.010	0.504	✓		"	"
0.880	+/-0.010	0.880	✓		"	"
Ø0.470 x 100°	+0.006/-0.001	Ø 0.470 x 108	✓		Vern	GA-01
0.440	+/-0.010	0.440	✓		"	"
0.600	+/-0.010	0.595	✓		"	"
1/4-28UNF-313	N/A	1/4-28 UNF	✓		1/4-28 UNFBolt	ref.
0.250	+/-0.010	0.249	✓		Vern	GA-01
Ø0.257	+0.006/-0.001	Ø 0.258	✓		"	"
1.750	+/-0.010	1.751	✓		"	"
0.870	+/-0.010	0.870	✓		"	"
0.440	+/-0.010	0.444	✓		"	"
R0.25	+/-0.030	R 0.250	✓		R-6	ref.
3.000	+/-0.010	3.001	✓		Vern	GA-01
3.96	+/-0.030	3.963	✓		H-6	31006
0.409	+/-0.010	0.412	✓		D-6	GA-08
0.808	+/-0.010	0.811	✓		H-6	31006
2.562	+/-0.010	2.562	✓		Vern	GA-01

Measured by:	B.A	DAS 08	Audited by:	25 3-08	Preliminary Approval:	
Date:	13/02/08		Date:	13-02-08	Date:	

Rev	Date	Change	Revised by	Approved
A	05.02.17	New Issue	KJ/JLM	
B	12.05.14	Dimensions updated per Dwg Rev B	KJ	JL

8 7 6 5 4 3 2 1

D3205-1 PEDAL BRACKET

## NOTES:

- 1) MATERIAL: 7075-T73 ALUMINUM BAR  
PER QQ-A-200/11 OR QQ-A-250/12  
REF DART SPEC M7075T73B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3
- 7) WEIGHT: 0.28 lbs

B	CONVERT DRAWING TO STANDARD FORMAT: 3.96 WAS 3.99 (ZN C2-1); 19° WAS 18° (D3-1); 42° WAS 41° (ZN C4-1); CHANGE DIMENSIONS TO 2 DEC. PL (ZN D5-1, D6-1, C4-2, D5-2, C7-2); ADD CHAMFER (ZN D3-2); REMOVE ENGRAVING ON D3205-3			RF	12.02.24
A	NEW ISSUE			RF	04.01.27
	REV. DESCRIPTION			BY	DATE
	DESIGN	RF	DART AEROSPACE LTD		
	DRAWN	RF	HAWKESBURY, ONTARIO, CANADA		
	CHECKED	<i>AS</i>	DRAWING NO. REV. B		
	MFG. APPR.	<i>AS</i>	D3205 SHEET 1 OF 2		
	APPROVED	<i>AS</i>	TITLE SCALE		
	DE APPR.	<i>AS</i>	BRACKET NTS		
	DATE	12.02.24	COPRIGHT © 2004 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

D

C

B

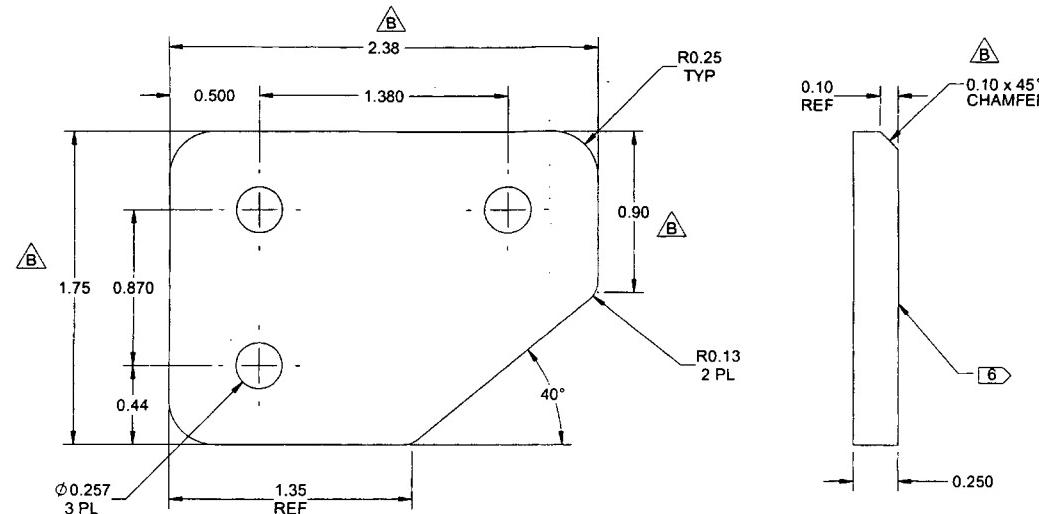
A

D

C

B

A

D3205-3 BACK PLATE

RELEASED  
2012-03-21  
ECN 12-545 Q

## NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.09 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b>
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>AS</i>	DRAWING NO.
MFG. APPR.	<i>AS</i>	REV. B
APPROVED	<i>AS</i>	D3205 SHEET 2 OF 2
DE APPR.	<i>AS</i>	TITLE
DATE	12.02.24	SCALE
		NTS

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8 7 6 5 4 3 2 1

## Jean-Luc Menard

**From:** Marc Bellavance <[mbellavance@dartaero.com](mailto:mbellavance@dartaero.com)>  
**Sent:** Tuesday, July 24, 2012 4:05 PM  
**To:** 'Jean-Luc Menard'  
**Cc:** 'David Shepherd'; 'L Lacelle'  
**Subject:** RE: D3205-1 Bracket PAR

PAR12-212 opened...



**Marc Bellavance**  
Technical/Shop Support  
T. 613-632-5200 | C. 613-676-0992 | F. 613-632-9311  
1270 Aberdeen Street, Hawkesbury, Ontario, Canada, K6A 2K7  
**Product Documentation: Verify Revision Status/Download [HERE!](#)**

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**From:** Jean-Luc Menard [<mailto:jmenard@dartaero.com>]  
**Sent:** Tuesday, July 24, 2012 8:41 AM  
**To:** Marc.Bellavance  
**Cc:** David Shepherd; L Lacelle  
**Subject:** D3205-1 Bracket PAR

Hi Marc,

On the d3205 dwg there was a grain direction added on the last rev, I spoke to David last night and he agrees that we should remove it as the material used for this part is 7075-t73 3.25" x 2.5" bar.

This Bar is also used for the D2224 rappel anchor, I don't think it's a good idea to have two bars with the same dimensions and only the grain separating the two.

So all that to say could you issue a par so we can get the grain direction changed on the d3205-1 pls.

THX

JL

**Jean-Luc Menard**  
Production Engineering Coordinator

The logo for DART Aerospace features the letters 'DAS' in a large, bold, stylized font. Below it, the words 'DART AEROSPACE' are written in a smaller, sans-serif font.  
1270 Aberdeen Street  
Hawkesbury Ontario  
Canada K6A 1K7  
Tel:(613)632-5200 Ext 227  
[jmenard@dartaero.com](mailto:jmenard@dartaero.com)

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